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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/113,090	07/10/1998	KIA SILVERBROOK	ART34-US	7669

7590 11/21/2003

KIA SILVERBROOK  
SILVERBROOK RESEARCH PTY  
393 DARLING ST  
BALMAIN, 2040  
AUSTRALIA

EXAMINER
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NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/113,090

**Applicant(s)**

SILVERBROOK ET AL.

**Examiner**

LUONG T NGUYEN

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 9/4/2003 have been fully considered but they are not persuasive.

In re page 14, Applicants argue that Suzuki was filed on 17 July 1998, seven days after the U.S. filing date of the present application. Therefore, Suzuki does not form part of the prior art for the purposes of 35 U.S.C. 103.(a).

In response, it should be noted that Suzuki (US 6,552,821) is a divisional of application Ser. No. 08/697,492 filed on August 26, 1996 (which was patented as Patent US 5,847,836). This filing date (August, 26 1996) is before the US filing date (7/10/1998) of the present application. Therefore, Suzuki patent qualifies as the prior art for rejection under 35 U.S.C. 103 (a).

In re page 3, Applicants argue that neither the mechanical shake correction technique nor the electronic shake correction technique disclosed in Misawa involve a processor which processes still images, nor do they involve the deblurring of individual pixels in a captured blurred still image.

In response, it should be noted that the feature “the deblurring of individual pixels in a captured blurred still image” is not a language claim. Instead, regarding claim 6, Applicants amended claim 6 with the limitation “a processor adapted to receive said blurred image from said

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image sensor and said velocity output from said velocity detector and to process said blurred image under programme control utilising the velocity output to deblur said at least one blurred pixel of said blurred image and to output said deblurred still image.”

The Examiner considers that claim 6 as amended still do not distinguish from Misawa et al. patent in view of Suzuki patent. Misawa et al. disclose processor as combination of camera shake correction part 235, signal processing circuit 42 and picture image correction circuit 144 (figures 9-10, column 12, line 66 through column 13, line 65, column 14, lines 5-45). It should be noted that since output signal from elements 235, 42 and 144 is different from the input signal, therefore, it is a “processor.” Further, it is noted that the output signal from elements 235, 42 and 144 is free from deteriorated image quality because the camera shake is corrected (“deblurs” the image after it has been captured). This processor (combination of elements 235, 42, 144) processes the picture image data (still images) and outputs the deblurred still image (figures 1, 10, column 6, lines 58-63, column 13, line 66 - column 14, line 45).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa et al. (US 5,282,044) in view of Suzuki (US 6,552,821).

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Regarding claim 6, Misawa et al. disclose a camera shake correction system comprising an image sensor adapted to capture a still, blurred image (picture image data, column 6, lines 58-63) comprising at least one blurred pixel disclosed as CCD 22 (figure 10, column 6, lines 45-50); a velocity detector adapted to determine the velocity of the camera system relative to an external environment and to produce a velocity output indicative thereof, disclosed as angular velocity sensor 255 (figure 10, column 14, lines 14-15); a processor adapted to receive said blurred image from said image sensor and said velocity output from said velocity detector and to process said blurred image under programme control utilising the velocity output to deblur said at least one blurred pixel of said blurred image and to output said deblurred still image, disclosed as combination of camera shake correction part 235, signal processing circuit 42 and picture image correction circuit 144 (figures 9-10, column 12, line 66 through column 13, line 65, column 14, lines 5-45). It should be noted that since output signal from elements 235, 42 and 144 is different from the input signal, therefore, it is a "processor." Further, it is noted that the output signal from elements 235, 42 and 144 is free from deteriorated image quality because the camera shake is corrected ("deblurs" the image after it has been captured). This processor (combination of elements 235, 42, 144) processes the picture image data (still images) and outputs the deblurred still image (figures 1, 10, column 6, lines 58-63, column 13, line 66 - column 14, line 45).

Misawa et al. fail to specifically disclose a portable handheld camera; and said processor is connected to an integral inkjet printer internal to said portable handheld camera device for output of said deblurred still image on print media. However, Suzuki teaches a printer-built-in camera which employs an ink-jet printer (figures 1-2, column 4, lines 25-55) and figures 1, 2

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also show that this printer-built-in camera is a portable handheld device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system in Misawa et al. by the teaching of Suzuki in order to provide a printer-built-in image-sensing apparatus which print-outputs a sensed image on print medium immediately after image sensing, and reduce waiting time from the completion of printing to the next image sensing (column 1, lines 12-17, column 2, line 66 – column 3, line 4).

4. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa et al. (US 5,282,044) in view of Suzuki (US 6,552,821) further in view of Nobuoka (US 5,986,698).

Regarding claim 7, Misawa et al. and Suzuki fail to specifically disclose wherein said velocity detector comprises an accelerometer. However, Nobuoka discloses an optical method which detects overall movement of a video camera by using an acceleration sensor (accelerometer, column 1, lines 40-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system in Misawa et al. and Suzuki by the teaching of Nobuoka in order to obtain an image sensing apparatus which detects the movement of the apparatus to perform vibration blur correction (column 1, lines 43-46, column 2, lines 55-56).

Regarding claim 8, Nobuoka discloses wherein said accelerometer comprises a micro-electro mechanical devices (gyro sensor, column 1, lines 44-46).

### *Conclusion*

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5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Luong Nguyen** whose telephone number is **(703) 308-9297**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on **(703) 305-4929**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA., Sixth Floor (Receptionist).


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

LN LN  
11/16/2003

  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600